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Washington, D.C. 20554

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Reference: PR Docket No. 92-235 "Spectrum Refarming"

Subject: TIA Technology Compatibility Committee

Dear Madame:

This correspondence is to formally advise the Commission of TIA's establishment of a Technology Compatibility Committee, in fulfillment of TIA's commitment articulated on page 12 of TIA's reply comments to 92-235, also known as "Spectrum Refarming" of 30 July 1993.

Under the auspices of TIA's TR-8, a Technology Compatibility Working Group designated WG8.8 has been established. This committee is co-chaired by Dr. Gregory M. Stone and Mr. David W. Brown.

The WG8.8 has been meeting on a regular basis since September 1993. TIA's Compatibility Committee is working under a charter and mission statement to address the following:

- ~ Accommodating the insertion of bandwidth efficient narrowband technologies likely to be deployed as a result of the Commissions "Spectrum Refarming" efforts;
- ~ The impact of new narrowband/bandwidth efficient digital and analog technologies on existing analog and digital technologies;
- ~ The impact of existing analog and digital technologies on new narrowband/bandwidth efficient digital and analog technologies; and
- ~ Migration and spectrum management issues involved in the transition to narrowband/bandwidth efficient digital and analog technologies. This will include



spectrum management and frequency coordination issues involved in narrowbanding existing spectrum considering: channel splitting from 25 KHZ to 12.5 KHZ and from 25 KHZ or 12.5 KHZ to 6.25 KHZ or 5 KHZ channel spacing.

The TIA Compatibility Committee has broad industry and user community participation. It is currently addressing the following technologies in anticipation of the Commission's impending decision on Spectrum Refarming:

- ~ 5 KHz channelized Analog Linear Modulation technology from Linear Modulation Technology Ltd./Securicor and NTT;
- ~ 5 KHz channelized Digital Linear Modulation technology from Linear Modulation Technology Ltd./Securicor and NTT employing 16-QAM modulation;
- ~ 12.5 and 25 KHz Channelized Analog FM;
- ~ 25 KHz channelized Digital (CVSD) FM;
- ~ APCO Project 25 Standards based systems at 12.5 and 6.25 KHz channelization employing C4FM and QPSK-c modulations;
- ~ 12.5 KHz channelized two (2) slot, F-TDMA technology from Ericsson employing CPM and QPSK modulations; and
- ~ 25 KHz channelized six (6) slot TDMA MIRS technology from Motorola employing quad QAM modulation.

In addition, WG8.8 is now holding concurrent meetings with the Institute of Electrical and Electronic Engineers (IEEE) Vehicular Technology Society's (VTS) Propagation Committee, which is also chaired by Dr. Stone. The IEEE Propagation Committee's contribution to technology compatibility effort is in area of supporting development of a standard electromagnetic wave propagation model for use in the simulation and modeling of future private land mobile systems that will be effected by the Commission's "refarming" narrowbanding mandate.

Anticipated work products from the Technology Compatibility Committee are:

- ~ Establishment of standardized methodology for modeling and simulating narrowband/bandwidth efficient technologies operating in a post "refarming" environment;
- ~ Establishment of a standardized methodology for empirically confirming the performance of narrowband/bandwidth efficient systems operating in a post "refarming" environment; and

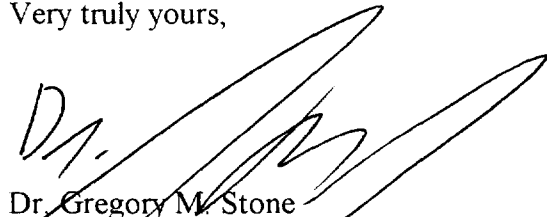
~ Aggregating the modeling, simulation and empirical performance verification standards into a unified "Spectrum Management Tool Kit" which may be employed by frequency coordinators, systems engineers and system operators.

The timetable for the completion of this effort has not yet been established. A definitive timetable will be formulated when the Commission's decisions concerning mandating the use of narrowband/bandwidth efficient technology and at what channel spacing is publicly announced.

The WG8.8 Technology Compatibility Committee and the IEEE-VTS Propagation Committee welcome the Commission's participation at any and all of our meetings and standards development processes.

We trust the information contained in this correspondence proves useful to the Commission. We will provide regular progress updates.

Very truly yours,



Dr. Gregory M. Stone
Co-Chairman, TIA TR-8, Technology Compatibility WG8.8
Chairman - IEEE VTS Propagation Committee

cc: Secretary FCC
Mr. Ralph Haller, Deputy Chief, Wireless Telecommunications Bureau
Mr. Robert McNamara
Ms. Kathryn Hosford
Mr. Charles Bethards - Chairman TIA TR-8
Secretary - IEEE-VTS
Mr. David W. Brown - Co-Chairman TIA TR-8, Technology Compatibility WG8.8